

MONTHLY WEATHER REPORT

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Heavy rain and gales at times, snowy and very cold at end of month.

A ridge of high pressure extending from an anticyclone to the north-east receded during the first few days of the month, allowing a series of fronts to move slowly eastwards over Britain. The Scandinavian anticyclone declined on the 8th and fronts continued to cross the British Isles, mostly from south-west to north-east. A large low-pressure area became centred over Britain on the 14th, but this drifted to northern France on the 16th and a ridge of high pressure from the Azores to Iceland then moved south-east across all parts. Another area of low pressure developed over the Bay of Biscay on the 20th and fronts moved northwards across the British Isles during the next few days. Frontal troughs became slow-moving over central and northern districts between the 24th and the 28th, with a cold easterly airstream persisting over northern Britain, while a mild south-westerly flow developed in the south. A depression moved eastwards across southern counties on the 29th and the cold air then moved south to all areas.

Weather

Except in north-west Scotland, where it was unusually dry, most parts of the United Kingdom had a very wet month, the heavy rainfall causing flooding in parts of the north. Scattered thunderstorms occurred, mainly in southern England. It was also windy, and there were severe gales at times on exposed coasts and hills. Overnight fog in inland areas was occasionally slow to clear, particularly in central England. Mild spells alternated with colder periods throughout December, and it became extremely cold by the 31st. Snow fell widely towards the end of the month, the strong winds causing deep drifts.

Wind

Wind directions were predominantly between east and south-east, although there were occasional south-westerlies. Except during the third week, wind speeds frequently reached gale force in exposed places, and on the 7th gusts of 73 and 74 kt occurred at several high-level stations in northern Britain. Southern districts experienced severe south-westerly gales on the 12th and 13th, when gusts of between 70 and 75 kt were recorded in the Isles of Scilly and along Channel coasts. Several people lost their lives because of the rough weather, and the heavy seas caused flooding, particularly in Portland. East to north-easterly gales spread southwards during the last few days and became severe at times over southern and eastern England.

Temperature

Monthly mean temperatures were between 0 and 1 °C above average over most southern counties of England, in parts of East Anglia and also in a few places in northern Scotland. Mean temperatures were below normal in all other areas, mostly by not more than 1 °C, but by between 1.5 and 2.0 °C in parts of the north Midlands. After a cold start, most areas became mild until around mid-month. Monthly maxima occurred during the second week in all districts and the 10th and 11th were particularly mild. The temperature rose to 16.0 °C at Yeovilton (Somerset) on the 10th and to 16.1 °C at Pen-y-Ffridd (Gwynedd) on the 11th. Colder conditions returned during the third week, but the southern half of Britain

had another mild spell between the 24th and the 28th. Cold weather then spread southwards and the end of the month was very cold. On the night of the 30th/31st the temperature fell to -15.2 °C at Gartly and to -15.1 °C at Glenlivet, both in the Grampian Region. Except at a few coastal places in southern and western Britain, temperatures on the 31st remained below 0 °C generally.

Rainfall

Monthly rainfall was well above average in Northern Ireland, where this was the wettest December over the Province as a whole since records began in 1900. England and Wales, taken together, had their wettest December since 1934. In eastern parts of Great Britain, and of Northern Ireland, many places recorded more than twice their average rainfall for the month and some more than three times the normal amount. In marked contrast with all other parts of the United Kingdom, however, much of north-western Scotland was very dry, with less than 25 per cent of the average monthly rainfall. The exceptionally heavy rain in many other areas caused extensive flooding at times, and during the last few days of the month the River Ouse rose to nearly 5 m above its normal level in York, causing the worst floods in the city since 1947. In the 48 hours starting at 09 GMT on the 27th the total rainfall at Silent Valley (Co. Down) was 214.3 mm, and 205.5 mm fell at West Baldwin Reservoir (Isle of Man) during the same period. Both these events are classified as 'very rare falls'.

Snow

Scattered wintry showers occurred during the first few days of the month and also in the early part of the third week. Snow fell more widely between the 20th and the 23rd, but showers of snow and sleet were confined mainly to northern districts from the 24th to the 28th. Frequent falls of snow occurred in all areas during the last few days of the month and accumulated depths of at least 25 cm were

measured in level snow in the north. Strong to gale force easterly winds caused considerable drifting, and many small towns and villages in Scotland and north-east England were cut off by snowdrifts. In south-west England, severe gales made the measurement of depths of level snow impossible in some places, but drifts of up to about 2 m were reported on the 31st.

Sunshine

Sunshine was above average in Northern Ireland as a whole, and also in western parts of Great Britain, but totals were below normal almost everywhere else. Much of England and Scotland, away from the west, had a dull month, and less than 50 per cent of the average was recorded in parts of north-eastern England and eastern Scotland. In Shetland, Baltasound, with only 3.4 hours of recorded sunshine, had one of its dullest Decembers since records began in the area early this century.

Fog

Overnight fog developed fairly frequently in eastern, central and south-east England during the first week and also between the 18th and the 23rd. The fog was widespread, dense and freezing at times and it persisted throughout the day in places. Large numbers of motor vehicles were involved in collisions in dense fog in eastern England on the 4th and 5th and in the Greater Manchester area on the 19th. Thick fog also delayed flights at London/Heathrow Airport on the 22nd. Patches of fog occasionally formed at other times during the month in England and occurred from time to time in the Central Lowlands of Scotland and over the Southern Uplands. Coastal fog affected north-eastern England and eastern Scotland on the 11th.

Miscellaneous Phenomena

The Press reported damage to a school in Llandissilio (Dyfed) on the 12th, following a whirlwind.

Table 1 District values

District	air temperature °C					mean 30-cm earth temp °C	rain-days	rainfall	sun-shine
	Highest Max*	Lowest Min*	max.	min.	mean				
	difference from average								
0 Scotland N	14.0	-8.8	-0.5	+0.4	0.0	+0.2	-3	50	75
1 Scotland E	12.5	-11.3	-1.2	+0.4	-0.4	+0.7	+5	187	59
2 England E & NE	13.8	-10.2	-0.9	-0.4	-0.7	+0.3	+8	296	55
3 East Anglia	14.1	-10.2	-0.2	+0.4	+0.1	+0.5	+5	190	78
4 Midland Counties	15.4	-10.9	-0.7	-0.5	-0.6	-0.1	+4	223	74
5 England SE & Central S	14.6	-7.4	+0.2	+0.6	+0.4	+0.4	+5	219	71
6 Scotland W	13.2	-9.2	-1.2	-0.3	-0.7	0.0	0	87	93
7 England NW & Wales N	15.3	-8.6	-1.1	-0.7	-0.9	-0.4	0	121	96
8 England SW & Wales S	15.5	-8.0	-0.2	+0.1	-0.1	+0.1	+4	174	83
N Ireland	13.5	-5.5	-0.6	-0.3	-0.5	+0.3	0	192	118
Scotland	14.0	-11.3	-1.0	+0.2	-0.4	+0.3	+1	108	76
England & Wales	15.5	-10.9	-0.5	-0.1	-0.3	+0.1	+4	204	76

* Highest maximum and lowest minimum of District Value Stations